Water Quality Presentation – 17 October 2012 – CalEPA, Sacramento

27 Sept DRAFT PRESENTATION OUTLINE FOR DISCUSSION

- 1. What do we protect?
 - a. Beneficial uses
 - i. Water Quality Fishable/Swimmable, Basin Plans, Sources of Drinking Water Policy
 - ii. Water Rights Water Code
- 2. Water Quality Objectives to protect Beneficial Uses
 - a. Numeric Objectives CTR/NTR, Basin Plans, Bay-Delta Plan
 - b. Narrative Objectives requires site specific interpretation
 - c. Objectives may vary with site specific conditions pH, hardness, temperature
 - d. Anti-Degradation Policies (Federal and State)
 - e. Water Quality Objectives in Water Rights permitting
- 3. What if Water Quality Objectives are not met?
 - a. Impaired Water Body List 303(d) process VALENTINA
 - b. TMDLs
 - i. Process
 - ii. Flow considerations in TMDL development
 - iii. Summary of TMDLs in the San Joaquin Basin
- 4. Impacts of reservoir operations on water quality
 - a. Flow dilution for pollutants from point and non-point sources
 - b. Changes in water quality pH, hardness, temperature, sediment capture, mercury methylation
 - i. Direct impacts on aquatic life
 - ii. Indirect impacts through changes in toxicity of constituents
- 5. Permitting
 - a. Surface Water discharges
 - i. CWA 402 NPDES State and Regional Boards
 - 1. Short discussion of NPDES Permit process, issues & examples for dams/irrigation systems
 - 2. Irrigated ag and stormwater exemptions
 - ii. CWA 404 USACOE
 - 1. Examples for dams/rivers/irrigation systems
 - iii. CWA 401 WQ Certifications
 - 1. Actions other than for FERC hydropower
 - 2. FERC hydropower ERIN
 - iv. California Water Code
 - 1. irrigated ag discharges
 - 2. dredge/fill activities

- b. Land disposal
- c. Water Rights permitting [is any WR permitting needed for this group beyond 401 Cert / FERC process? If so, we need a WR person for this.]
- 6. Coordinated Monitoring Efforts in the Basin